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Chicago Architecture

by William Hodges

(English 1102)

The Assignment: To write a position paper on a research question of our choice that is related to our major or program of study and to be able to convey the position to an audience.

The Chicago Fire of 1871 was undoubtedly one of the greatest tragedies to ever happen not only to Chicago, but also to any other city in the United States. Thousands upon thousands of lives were lost, and there were millions of dollars in damage to people's personal belongings. It is safe to say that if the fire happened today, it would take Chicago a lifetime to recover, if recovery was even possible. All the heartache and misery aside, let me take this opportunity to dwell on the lighter side of this unfortunate circumstance in Chicago history. Having been born and raised in the western suburbs of Chicago, I have had the opportunity not only to see great architecture first hand, but also to interact with it. My statement is simple: had it not been for the fire that burned nearly ninety percent of the city, we would not be where we are today as a booming metropolis and as a city on the forefront of modern architecture and design.

Let me begin by giving a brief definition of the components of good architecture, which is the design of space around us, both interior and exterior. Good architecture carries three general unities, if you will; the first is the unity between the foundation and the structure, the second is the unity between the structure itself and all of its working and non-working parts, and the third is the environment around the structure and how that structure interacts with it. Chicago is what is known as a grid of defined spaces; due to our extremely flat geography, it was originally plotted in a fashion in which all spaces were created equal and the use for each space was undefined. This gave the original builders and designers a very rare freedom, a freedom every architect dreams of: a clear canvas.

Unlike the ancient cities in Greece and the architecturally historic countries in and around Europe, such as Rome, Italy, Germany, France, and Spain, the architects and engineers of Chicago had the opportunity to do literally whatever they wanted to. The granite, which was used to erect nearly every single structure built both pre and post Chicago Fire, was quarried locally up and down the Illinois and Michigan Canal; conveniently enough, the canal was used to transport the heavy product to wherever it was needed. Following this, in the years between 1881-1884, the introduction of steel framing by William Lebaron Jenney flooded the building market. The location of Chicago on Lake Michigan, and the direct route that connected Chicago to Pittsburgh, ignited the Chicago steel industry and paved the way for Chicago as being the steel frame capital of the world. Chicago has never looked back.

In 1872, Andrew Carnegie, owner of what was at that time called the Freedom Iron Company, went to England to visit the steel plant owned by a gentleman named Sir Henry Bessemer, the inventor of what is known as Bessemer steel. Bessemer steel is created using a process of feeding forced oxygen into molten pig ore/iron ore to burn off impurities which reduce the structural strength of steel, resulting in both a stronger, slightly lighter, and extremely more efficient means of producing steel (Iano 370). Mr. Carnegie was instantly sold on the concept and immediately returned to the United States to expand his already enormous company (interestingly enough, Carnegie, J.P. Morgan, and Charles Schwab all originally made their fortunes in steel). This was perfect timing for a city that was just recently burned to the ground and in search of a rebirth.

Once news of the Bessemer process made its way into the ears of area architects, designs never before imaginable were becoming a realization. Steel from the north began to flood the ports of Chicago (as mentioned earlier, Lake Michigan became a hub for floating barges from Pittsburgh), filled with Bessemer steel, and from the nearby south and western cities bordering the Illinois and Michigan Canal granite was readily accessible as well. This led to what is still to this day the single greatest explosion of building Chicago has ever witnessed.

Quite possibly the most distinguished group of architects ever assembled in Chicago also formed a style and discipline of architecture called the "Chicago School." William Lebaron Jenney was at the head of this class; he had several pupils underneath him, including, Daniel Burnham, John Root, Dankmar Adler, and Louis Sullivan. The Chicago School cast aside Greek and Roman models in favor of simplicity and function. In adherence to Louis Sullivan's mandate that form should follow function, the Chicago School architects adorned their buildings' facades sparingly with vertical and horizontal lines and geometric shapes (Pridmore Chapter 2).

Among the buildings representative of the Chicago School are the Montauk Building (Burnham and Root, 1882), the Auditorium Building (Adler and Sullivan, 1889), the Monadnock Building (Burnham and Root, 1891), and the Carson Pirie Scott Store (originally the Schlesinger-Mayer Department Store; Sullivan, 1899-1904). Chicago, because of this informal school, has been called the "birthplace of modern architecture." These "Chicago School" buildings have been praised as important precursors to 20th-century steel-and-glass skyscrapers (Condit Chapter 2). In addition, Chicago had Jens Jensen, who was the best landscape architect to come from the area, to design and implement most of the early gardens and parks around the city. To his credit, he had been part of the design team that reconstructed Humboldt, Garfield, and Douglas parks ("Jens Jensen").

It was around this time as well that Chicago, New York, St. Louis and San Francisco were all in the race to host the Columbian Exposition, which at the time was the largest design and build exposition in the United States. Chicago wound up being the convincing winner because of its proximity to the necessary building materials, and in 1891 Daniel H. Burnham, an architect raised and educated in Chicago under William Lebaron Jenney, assembled the architects from all over the world that flocked to the city.

Most notably of all these architects were several recent graduates and professors from the Armour Institute of Technology (now the Illinois Institute of Technology), which included Martin Roche, William Alderman, Horace S. Powers, and Thomas Eddy Tallmadge. All of these men were not only incredible draftsmen but were also responsible for designing and overseeing the construction of several town plans as well as buildings in Chicago's Loop district. Not to be out done, the University of Illinois also contributed many prestigious architects. Among these men were Walter Burley Griffin, William Eugene Drummond, Harry Robinson, John VanBergen, and Barry Byrne (Pridmore Chapter 3).

Many of the aforementioned owe their careers to the Columbian Exposition; others credit a man by the name of Frank Lloyd Wright and what became known as Prairie Style architecture in the early 1900's. Although many know this as Frank Lloyd Wright's claim to fame, Louis Sullivan had a major impact on this style as well. As most know, a stroll through Oak Park, Hyde Park, and River Forest will give you several astonishing examples of their work. Low sloped roofs, cantilevered porches, long horizontal lines, exposed heavy timber framing, ornamented glass, and hidden entranceways are several of the main characteristics involved with this style ("Prairie Styles").

This brings us into a very important period for Chicago architecture: the 1920's and the years following the Great Depression in the 1930's. From 1910 to just before the depression Chicago saw a tremendous increase in building in and around the Loop area. The most notable style, one taken from the increase in European architects migrating here, was Art Deco. One of the city's most outstanding Art Deco style skyscrapers is 333 North Michigan Avenue, designed by Holabird and Root and completed in 1928. It is one of four buildings surrounding the Michigan Avenue Bridge

that define one of the city's--and nation's--finest urban spaces ("Deco Chicago"). The building's base is sheathed in polished granite in shades of black and purple. Its upper stories, which are set back in dramatic fashion to correspond to the city's 1923 zoning ordinance, are clad in buff-colored limestone and dark terra cotta, its unique site further heightens the building's prominence. Due to the jog of Michigan Avenue at the bridge, the building is visible the entire length of North Michigan Avenue, appearing to be located in the center of the street (Stamper Chapter 6).

The Palmolive Building, located at 919 North Michigan Avenue, was also designed by one of Chicago's oldest and most prestigious architectural firms, Holabird and Root, and completed in 1929. Built for one of the world's leading soap manufacturers, this office building ("a monument to cleanliness") was the first commercial skyscraper built far from the Loop - at the northern end of Michigan Avenue. It is one of the country's premier Art Deco style "set-back" skyscrapers, again influenced by municipal zoning laws and the dramatic renderings of New York architect Hugh Ferriss. It was known as the Playboy Building from 1965 to 1989, when it served as headquarters for Playboy magazine ("Art Deco World"). Other significant buildings built in the "Loop" area by Holabird and Root include, the Chicago Board of Trade, and the former Chicago Daily News Building.

Chicago, like most of the country, hit a standstill in the thirties and forties and concentrated its efforts on surviving both World Wars as well as the Great Depression. However, once our economy began to recover, so did the erection of skyscrapers. Glass and aluminum cladding were now being implemented into our cityscape, and shapes of buildings were now bordering on radical or eccentric. A new movement was preparing to spawn from Chicago. The origins of this movement are traced back to two powerfully interactive circumstances: the advance of modernist architecture as a whole in America and the arrival of a single, highly influential figure, Ludwig Mies van der Rohe, to Chicago.

One of the pioneers in the development of modernism overseas, Mies came from his native Germany in 1937 to assume the headship of the School of Architecture at Chicago's Armour Institute of Technology (IIT). Two of his most important European contemporaries, Walter Gropius and Marcel Breuer, took up residence as well in the United States, where, like Mies, they sought to advance the cause of modernism by eliminating the historical vocabulary in building design and concentrating more on neutral forms stripped of ornament and suggestive of a machine technology (Condit Chapter 11). By 1950 Mies had begun to produce a generation of students deeply committed to his style of both design and theory; in doing so he also affected just as many independent designers who were impressed by the quality of his built work.

These influences made themselves most obvious in Chicago, and by the late 1950s, when building in Chicago resumed at a steady pace, the first works suggesting the presence of a Miesian school had been realized. Nonetheless, as the fifties passed into the sixties, the term "Miesian" seemed too personal to accommodate a growing body of Chicago architecture indebted to him but not directly imitative of him, and the notion of a Chicago school gained credibility. The stylistic features alluded to here fit much of the work in question, centering on the metal cage and undecorated (or nearly undecorated) frame of the building (Pridmore Chapter 5). Nevertheless, there are as many differences of expressive intent as similarities between Miesian architecture and that of the now prehistoric Chicago School.

The first large firm in Chicago to put up the steel and glass high-rise buildings was the office of Skidmore, Owings & Merrill (SOM). The Inland Steel Building of 1957, the first commercial structure to rise in the Loop following World War II, was notable for its stainless steel frame, its columns placed outside the curtain wall, and its column-free interior. The two Skidmore, Owings and Merrill commercial buildings regarded most highly by critics are among the tallest in the city: the John Hancock Center (1969), with its tapering wedge-shaped volume and diagonal exterior cross bracing, and the 1,454-foot-high Sears Tower (1974), the loftiest building in the United States thus far.

Both of these structures are examples of the tubular frame, in which the load is carried not by the traditional cage but mostly by exterior walls conceived as tubes, rectangular in plan (The Sears Tower is composed of nine bundled tubes). The major architects at SOM who helped significantly to define the character of the cutting edge style of Chicago architecture were Myron Goldsmith, Bruce Graham, Fazlur Khan (who was primarily active as an engineer), and Walter Netsch (Pridmore Chapter 6). Today we see this same style of modern architecture being exported to countries such as India, Taiwan, Bangladesh, and Hong Kong. Most notably of all the designs and accomplishments from Skidmore, Owings and Merrill, perhaps we should give gratitude and applause for their winning entry for the Freedom Tower In New York City, which, as it stands now is expected to be completed sometime in the year 2009. The Burj Dubai in the United Arab Emirates, this colossal tower will reach an unprecedented 161 floors into the sky, and in fact the actual height of the building has been kept under lock and key for fear that another firm will implement into a design of a building currently under construction additional levels to supercede the Burj's stature.

Both of these amazing towers are to include hotel property, office space, restaurants, shopping centers, condominiums and rental apartments, in addition to a designated number of mixed-use levels. Truly, they will both be unlike any superstructure completed so far in this country or in any other for that matter. So it would seem that unlike in the beginning, when pieces of our architecture here in Chicago were being imported, we are now sending it overseas as a gift to the rest of the world to see and interact with, and they can now enjoy what I have had the pleasure to experience growing up with here in Chicago. With construction currently underway for Trump Tower and a proposed design of the Forham Spire by Santiago Calatrava, it would seem that Chicago isn't quite yet prepared to give up their throne as one, if not the, architecture capital of the world.

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